

ABSTRACT

A glowing contact or high resistance test device includes a housing and first and second circuits substantially within the housing. The first and second circuits include first and second electrical plugs disposed from the housing and adapted to electrically engage and thermally communicate with line and neutral circuits, respectively, of an electrical receptacle. First and second diode temperature sensors are proximate the first and second circuits and the first and second electrical plugs, respectively. The first and second sensors output first and second signals representative of the first and second temperatures of the line and neutral circuits, respectively. An amplifier circuit determines a difference between the first and second signals. A window comparator circuit includes a light emitting diode, which displays an indication signal when the absolute value of the difference exceeds a predetermined value.